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1. Project Description

A. Statement of GO Activity

The Bureau of Land Management (BLM) has sponsored long-term monitoring of Desert Tortoise populations at selected study plots within or near OHV recreation areas since 1978. Information about Desert Tortoises from these plots concerning their health, movements, habitat use, and causes of death has contributed greatly to our understanding of the status of this federally threatened species in the Mojave Desert. Managers and biologists have used the information to reduce impacts from OHV recreation and travel in efforts to speed recovery of tortoise populations and to restore their habitats. The U.S. Geological Survey (USGS), Biological Resources Division, under the direction of Dr. Kristin Berry, monitors these long-term study plots.

This grant would support continuing research on the tortoise, research that is funded by BLM and USGS on Desert Tortoise populations within and adjacent to popular high-use motorized recreation areas in the western Mojave Desert. The grant would provide support for determining tortoise densities and other population characteristics (sex ratios, mortality rates, causes of death) in two types of management areas: the Rand Mountain–Fremont Valley Management Area, a vehicle recreation area, and the Desert Tortoise Natural Area, a control area with limited vehicle use in the vicinity of the interpretive center. The majority of the effort will be focused outside the Desert Tortoise Natural Area, on lands used by vehicle-oriented recreationists. Data from the Desert Tortoise Tortoise Natural Area and long-term plots are valuable as baseline comparisons and for assessing recovery. Field surveys will be conducted on both long-term plots and one-hectare plots. These methods have been tested and are successful for monitoring trends. The survey and census methods of both the long-term permanent study plots and hectare plots draw on specialized techniques developed by the USGS. Partnering with the USGS is much more efficient and less expensive for BLM than using private-sector contractors or BLM staff biologists. USGS developed the one-hectare plot surveys specifically for the OHMVR Division as a cost-efficient method of determining the distribution, abundance and location of potential clusters of tortoises within a larger area. The one-hectare plot surveys also provide valuable information on sheep grazing impacts, predators, and other human-related land uses. In addition, field scientists keep records of other listed species (Mohave Ground Squirrel) and BLM sensitive species (e.g., Burrowing Owl) seen in the course of Desert Tortoise monitoring.

The precision for density estimates of tortoises, especially when tortoise are rare in areas where they have declined markedly, is higher than in other Desert Tortoise monitoring protocols in place. Also, this method gives detailed information for wildlife managers about the health of individual live tortoises and forensic analyses of dead tortoises encountered on the plots. In this way, scientists can track the causes of death affecting Desert Tortoises and find ways to prevent further unnecessary mortality.

The OHMVR Division has awarded grants to BLM for USGS scientists to monitor the Jawbone Canyon OHV Open Area (Ridgecrest Field Office, 2004), the El Mirage Recreation Area (Barstow Field Office, 2005), the El Paso Mountains (Ridgecrest Field Office, 2006), and Chemehuevi Wash (Needles Field Office, 2008).

At one time, Desert Tortoise populations from these study plots and the general region supported the highest densities in the Mojave Desert. Beginning in the late 1980s, however, tortoises began to die at unprecedented rates from a combination of imported diseases and predation by ravens, vandalism, uncontrolled dogs, and coyotes, resulting in lowered population densities of tortoises. A current survey of populations in the general area will provide data for placing west Mojave populations in context with tortoise populations elsewhere in the California Deserts. The information will help to document recovery efforts and set new priorities for Desert Tortoises. The results would also determine whether significant differences exist in tortoise populations inside the Desert Tortoise Natural Area and in adjoining areas in the Rand Mountains–Fremont Valley Management Area where OHV riding occurs on travel routes designated by the BLM.

B. Relation of Proposed Project to OHV Recreation

This project is designed to provide managers with information essential (1) to multiple use management of public lands administered by the BLM, thus allowing continued OHV use; (2) to determining the status of local and regional Desert

Tortoise populations; and (3) to identifying factors that affect tortoise habitat in the Rand-Fremont Management Area and nearby lands used by OHV riders. The majority of the project will occur on public lands where vehicle use occurs. A minor part of the project will involve lands within the Desert Tortoise Natural Area, because the data can serve as an informative baseline and comparison. The Natural Area also hosts an interpretive nature center that draws many OHV riders each year. Currently, OHV riders represent more than half of all visitors to the nature center, and numbers of OHV visitors increase every year as their interest in the natural history of the Rand Mountains and the Natural Area and in the fate of the Desert Tortoise grows.

Current data on the population size and health status of Desert Tortoises in the region are essential for providing the best locality-specific information on impacts to Desert Tortoises in comparable habitats where OHV riding occurs and where it is absent. With this information, the agency can know whether its current multiple-use and protection management is effective for Desert Tortoise populations. Environmental organizations have been concerned about ongoing unauthorized vehicle entry and riding in the Natural Area, whereas OHV recreation advocates have protested closures of many trails in the Rand Mountains–Fremont Management Area and adjacent lands to halt habitat fragmentation from route proliferation.

This survey will assist in detecting any current impacts of recreation on the Desert Tortoise in this historically core habitat. BLM wildlife biologists will have more information on fine-scale habitat use by desert tortoises and can subsequently adjust wildlife management based on high-quality data for the local areas with designated trails for OHV riding and areas closed to riding such as the Desert Tortoise Natural Area. Improved route signing, fencing, route restoration and improvement, and outreach to the OHV riding public can make a difference in people's awareness and recreation experience in the area.

C. Size of the Project

The project area is approximately 100 square miles in the western Mojave Desert of eastern Kern County, is in the Fremont Valley and on the slopes of the Rand Mountains. Plots are located in BLM's Rand Mountains-Fremont Valley Mangement Area and two Areas of Critical Environmental Concern (ACECs), the Desert Tortoise Natural Area (no OHV riding) and the West Rands ACEC (OHV riding on designated trails). The project area is nine miles northeast of California City and 29 miles southwest of Ridgecrest.

D. Location and description of OHV opportunities

The project area is within and adjacent to the Rand Mountain-Fremont Valley Management Area, an OHV riding area on designated trails within Desert Tortoise critical habitat (designated as the Fremont-Kramer Desert Wildlife Management Area). Three BLM OHV Open Riding Areas are managed by the Ridgecrest Field Office with support from the Friends of Jawbone: Jawbone Canyon Open Area (9 miles air distant), Dove Springs Open Area (14 miles), and Spangler Off-Highway Vehicle Area (22 miles). Other destinations nearby for riding on designated OHV routes are the Last Chance Canyon ACEC, the eastern El Paso Mountains, the Red Mountain OHV route network, and the mountain hinterlands of the Jawbone-Butterbredt ACEC at the eastern edge of the southern Sierra Nevada. Randsburg and Johannesburg are small communities at the east end of the Rand Mountains where OHV riders gather to meet friends and stage rides into the history-rich Randsburg Mining District.

2. Rerouting Requirements

Rerouting

(a) Does your project involve rerouting of any roads and trails? ☐ Yes ☑ No

If response to question (a) is 'Yes', a Project timeline, conceptual drawings and site plans are required (See 'Attachments' tab at the top of the screen)

If response to question (a) is 'No', skip details related to rerouting

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1. Project Timeline (Required if project includes necessary rerouting)

2. Conceptual Drawings and Site Plans (Required if project includes necessary rerouting)

3 Project-Specific Maps

Attachments: Project Area Map

Desert Tortoise Natural Area with Surrounding Project Area

4. Optional Project-Specific Application Documents

Attachments: Project Photos

	FOR OFFICE USE ONLY: Version # _____ APP # _____		
APPLICANT NAME :	BLM - California Desert District		
PROJECT TITLE :	Ecology - Desert Tortoise Large-Plot Monitoring	**PROJECT NUMBER (Division use only) :**	
PROJECT TYPE :	☐ Acquisition ☐ Development ☐ Education & Safety ☑ Ground Operations ☐ Law Enforcement ☐ Planning ☐ Restoration		
PROJECT DESCRIPTION :	The Bureau of Land Management (BLM) has sponsored long-term monitoring of Desert Tortoise populations at selected study plots within or near OHV recreation areas since 1978. Information about Desert Tortoises from these plots concerning their health, movements, habitat use, and causes of death has contributed greatly to our understanding of the status of this federally threatened species in the Mojave Desert. Managers and biologists have used the information to reduce impacts from OHV recreation and travel in efforts to speed recovery of tortoise populations and to restore their habitats. The U.S. Geological Survey (USGS), Biological Resources Division, under the direction of Dr. Kristin Berry, monitors these long-term study plots. This grant would support continuing research on the tortoise, research that is funded by BLM and USGS on Desert Tortoise populations within and adjacent to popular high-use motorized recreation areas in the western Mojave Desert. The grant would provide support for determining tortoise densities and other population characteristics (sex ratios, mortality rates, causes of death) in two types of management areas: the Rand Mountain–Fremont Valley Management Area, a vehicle recreation area, and the Desert Tortoise Natural Area, a control area with limited vehicle use in the vicinity of the interpretive center. The majority of the effort will be focused outside the Desert Tortoise Natural Area, on lands used by vehicle-oriented recreationists. Data from the Desert Tortoise Tortoise Natural Area and long-term plots are valuable as baseline comparisons and for assessing recovery. Field surveys will be conducted on both long-term plots and one-hectare plots. These methods have been tested and are successful for monitoring trends. The survey and census methods of both the long-term permanent study plots and hectare plots draw on specialized techniques developed by the USGS. Partnering with the USGS is much more efficient and less expensive for BLM than using private-sector contractors or BLM staff biologists. USGS developed the one-hectare plot surveys specifically for the OHMVR Division as a cost-efficient method of determining the distribution, abundance and location of potential clusters of tortoises within a larger area. The one-hectare plot surveys also provide valuable information on sheep grazing impacts, predators, and other human-related land uses. In addition, field scientists keep records of other listed species (Mohave Ground Squirrel) and BLM sensitive species (e.g., Burrowing Owl) seen in the course of Desert Tortoise monitoring. The precision for density estimates of tortoises, especially when tortoise are rare in areas where they have declined markedly, is higher than in other Desert Tortoise monitoring protocols in place. Also, this method gives detailed information for wildlife managers about the health of individual live tortoises and forensic analyses of dead tortoises encountered on the plots. In this way, scientists can track the causes of death affecting Desert Tortoises and find ways to prevent further unnecessary mortality. The OHMVR Division has awarded grants to BLM for USGS scientists to monitor the Jawbone Canyon OHV Open Area (Ridgecrest Field Office, 2004), the El Mirage Recreation Area (Barstow Field Office, 2005), the El Paso Mountains (Ridgecrest Field Office, 2006), and Chemehuevi Wash (Needles Field Office, 2008). At one time, Desert Tortoise populations from these study plots and the general region supported the highest densities in the Mojave Desert. Beginning in the late 1980s, however, tortoises began to die at unprecedented rates from a combination of imported diseases and predation by ravens, vandalism, uncontrolled dogs, and coyotes, resulting in lowered population densities of tortoises. A current survey of populations in the general area will provide data for placing west Mojave populations in context with tortoise populations elsewhere in the California Deserts. The information will help to document recovery efforts and set new priorities for Desert Tortoises. The results would also determine whether significant differences exist in tortoise populations inside the Desert Tortoise Natural Area and in adjoining areas in the Rand Mountains–Fremont Valley Management Area where OHV riding occurs on travel routes designated by the BLM.		

	Line Item	Qty	Rate	UOM	Grant Request	Match	Total
DIRECT EXPENSES							
Program Expenses							
1	**Staff**						
	Other-Biologist	400.000	70.080	HRS	0.00	28,032.00	28,032.00
	Other-Biologist Asst.	1200.000	51.410	HRS	0.00	61,692.00	61,692.00
	Other-GIS Specialist	80.000	41.020	HRS	0.00	3,282.00	3,282.00
	Other-Contract Administrator	40.000	51.040	HRS	0.00	2,042.00	2,042.00
	Total for Staff				0.00	95,048.00	95,048.00
2	**Contracts**						
	Other-USGS Large Plot Monitoring	1.000	180000.000	EA	180,000.00	0.00	180,000.00
3	**Materials / Supplies**						
4	**Equipment Use Expenses**						
	Other-Field Vehicle 4x4	6.000	704.000	MOS	0.00	4,224.00	4,224.00
5	**Equipment Purchases**						
6	**Others**						
7	**Administrative Costs**						
	Administrative Costs-Contracting Office	100.000	50.000	HRS	0.00	5,000.00	5,000.00
Total Program Expenses					180,000.00	104,272.00	284,272.00
TOTAL DIRECT EXPENSES					180,000.00	104,272.00	284,272.00
TOTAL EXPENDITURES					**180,000.00**	**104,272.00**	**284,272.00**

	Line Item	Grant Request	Match	Total	Narrative
DIRECT EXPENSES					
Program Expenses					
1	Staff	0.00	95,048.00	95,048.00	
2	Contracts	180,000.00	0.00	180,000.00	
3	Materials / Supplies	0.00	0.00	0.00	
4	Equipment Use Expenses	0.00	4,224.00	4,224.00	
5	Equipment Purchases	0.00	0.00	0.00	
6	Others	0.00	0.00	0.00	
7	Administrative Costs	0.00	5,000.00	5,000.00	
Total Program Expenses		180,000.00	104,272.00	284,272.00	
TOTAL DIRECT EXPENSES		180,000.00	104,272.00	284,272.00	
TOTAL EXPENDITURES		**180,000.00**	**104,272.00**	**284,272.00**	

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ITEM 1 and ITEM 2

ITEM 1

a. ITEM 1 - Has a CEQA Notice of Determination (NOD) been filed for the Project? (Please select Yes or No) ○ Yes ◉ No

ITEM 2

b. ITEM 2 - Are the proposed activities a "Project" under CEQA Guidelines Section 15378? (Please select Yes or No) ○ Yes ◉ No

c. The Application is requesting funds solely for personnel and support to enforce OHV laws and ensure public safety. These activities would not cause any physical impacts on the environment and are thus not a "Project" under CEQA. (Please select Yes or No) ○ Yes ◉ No

d. Other. Explain why proposed activities would not cause any physical impacts on the environment and are thus not a "Project" under CEQA. DO NOT complete ITEMS 3 – 9

Project involves field workers performing survey transects with no disturbance to the desert environment.

ITEM 3 - Impact of this Project on Wetlands

ITEM 4 - Cumulative Impacts of this Project

ITEM 5 - Soil Impacts

ITEM 6 - Damage to Scenic Resources

ITEM 7 - Hazardous Materials

Is the proposed Project Area located on a site included on any list compiled pursuant to Section 65962.5 of the California Government Code (hazardous materials)? (Please select Yes or No) ○ Yes ○ No

If YES, describe the location of the hazard relative to the Project site, the level of hazard and the measures to be taken to minimize or avoid the hazards.

ITEM 8 - Potential for Adverse Impacts to Historical or Cultural Resources

Would the proposed Project have potential for any substantial adverse impacts to historical or cultural resources? (Please select Yes or No) ○ Yes ○ No

If YES, describe the potential impacts and for any substantially adverse changes in the significance of historical or cultural resources and measures to be taken to minimize or avoid the impacts.

ITEM 9 - Indirect Significant Impacts

CEQA/NEPA Attachment

Attachments: Desert Tortoise 2009 CEQA/NEPA

FOR OFFICE USE ONLY: Version # _____ APP # 700239

1. Project Cost Estimate - Q 1. (Auto populates from Cost Estimate)

1. As calculated on the Project Cost Estimate, the percentage of the cost of the Project covered by the Applicant is 3

(Check the one most appropriate) (Please select one from list)

- ○ 76% or more (10 points)
- ○ 51% - 75% (5 points)
- ◉ 26% - 50% (3 points)
- ○ 25% (Match minimum) (No points)

2. Failure to Complete - Q 2.

2. Failure to complete the Project would result in: 8

(Check all that apply) : Maximum of 8 points (Please select applicable values)

- ☑ Loss of OHV Opportunity (6 points)
- ☐ Negative impact to cultural sites (2 points)
- ☑ Damage to special-status species or other sensitive habitat (2 points)
- ☑ Potential trespass (2 points)
- ☐ Additional damage to Facilities (1 point)

Explain each statement that was checked

Unauthorized vehicle use is occurring in closed areas as well as where travel is confined to designated routes. The BLM is required to document locations of problem areas and the effects, if any, on tortoises and their habitats. The BLM can then implement appropriate measures to reduce unauthorized use, e.g., signing, educational efforts, and law enforcement efforts. With this project, the BLM will obtain the information essential to understanding OHV use patterns in desert tortoise habitat and better ways to improve compliance and recreation use. The information can be used to develop educational programs for the OHV enthusiast and improve BLM's management of unauthorized uses. If compliance does not improve in the Rand Mountain-Fremont Valley Management Area, more closures may occur in the future.

3. Sustain OHV Opportunity - Q 3.

3. The Project would sustain OHV Opportunity by 4

(Check all that apply) (Please select applicable values)

- ☐ Maintaining trail or road tread (5 points)
- ☐ Installing or repairing erosion control features (3 points)
- ☑ Providing traffic control and/or educational signage (3 points)
- ☑ Maintaining multi use (ATV, Dirt Bikes, 4x4, etc) (1 point)
- ☐ Providing varied levels of riding difficulty (1 point)

Explain each statement that was checked

The project will provide critical information essential for determining where signs would be most effectively placed, how and if re-routing vehicle traffic and use would reduce unauthorized use and conflicts with the tortoise, and educating the public. Without this information, BLM efforts to achieve compliance are likely to be less effective. Such information will benefit the general and OHV-oriented publics by showing that responsible OHV use can be sustained on designated routes and within designated open areas.

4. Public Input - Q 4.

4. The Project was developed with public input employing the following 2

(Check all that apply) : Maximum of 2 points (Please select applicable values)

- [x] Meeting(s) with the general public to discuss Project (1 point)
- [x] Conference call(s) with interested parties (1 point)
- [x] Meeting(s) with stakeholders (1 point)

Explain each statement that was checked

The BLM holds numerous public meetings and meetings with interested parties and stakeholders to discuss the Rand Mountains-Fremont Valley Management Area, the Desert Tortoise Natural Area, and how best to achieve objectives of maintaining OHV opportunities and also protect natural resources within the region encompassing the area between the Jawbone Canyon Open Area in the west to the Spangler Open Area in the east. Examples of meetings with the general public and stakeholders include, but are not limited to: frequent Steering Committee meetings with stakeholders in the Ridgecrest Field Office, annual meetings between the BLM and the Desert Tortoise Preserve Committee, Inc., and frequent meetings and phone calls with Friends of Jawbone and California Dept. of Fish and Game. Information is also shared at the Desert Managers Group. The BLM Field Office manager or representative is involved in most meetings with the public.

5. Utilization of Partnerships - Q 5.

5. The Project will utilize partnerships to successfully accomplish the Project. The number of partner organizations that will participate in the Project are 4

(Check the one most appropriate) (Please select one from list)

- (•) 4 or more (4 points)
- ( ) 2 to 3 (2 points)
- ( ) 1 (1 point)
- ( ) None (No points)

List partner organization(s):

United States Geological Survey
Desert Tortoise Preserve Committee
California Department of Fish and Game
Desert Tortoise Council
Desert Managers Group

6. Impact to Natural and Cultural Resources - Q 6.

6. The Project will avoid and/or minimize impact to natural and cultural resources by 1

(Check all that apply) : Maximum of 7 points (Please select applicable values)

- [ ] Maintaining physical barriers to control OHV use (1 point)
- [ ] Protecting water quality (1 point)
- [ ] Providing bridges instead of wet crossings where appropriate (1 point)
- [x] Protecting special-status species (1 point)
- [ ] Re-routing trails to divert away from riparian/wetlands areas (1 point)
- [ ] Providing sanitary facilities (1 point)
- [ ] Protecting cultural site(s) (1 point)
- [ ] Site design precludes the need for the above measures (7 points)

Explain each statement that was checked

This project is on-going to fulfill requirements of the HMPs for the five BLM field offices in the California Desert District (Barstow, El Centro, Needles, Palm Springs, Ridgecrest) to manage and monitor Desert Tortoise populations for their recovery on public lands.

7. Recycled Materials - Q 7.

7. The Project incorporates recycled materials by utilizing

(Check all that apply) (Please select applicable values)

- ☐ Barrier materials which include recycled content or materials obtained onsite (1 point)
- ☐ Signs, sign posts or education kiosks which use products with recycled content (1 point)
- ☐ Erosion control features which use materials with recycled content (1 point)
- ☐ Paper used for trail maps which includes recycled content (1 point)
- ☐ Other products with recycled content (Specify) (1 point)

8. Sustainable Technologies - Q 8.

8. The Project makes substantial use of sustainable technologies such as 0

- Alternative fuel vehicles and equipment
- Renewable energy sources (e.g., solar, wind)
- Low volatile organic compound emission materials (e.g., paint, sealants, carpet)
- Low flow plumbing fixtures
- Water efficient landscaping

(Check the one most appropriate) (Please select one from list)

- ◉ No (No points)
- ○ Yes (4 points)

Explain 'Yes' response

9. Motorized Access - Q 9.

9. The Project improves and/or maintains facilities that provide motorized access to the following non-motorized recreation opportunities 6

(Check all that apply) Scoring: 2 points each, up to a maximum of 6 points (Please select applicable values)

- ☑ Camping
- ☑ Birding
- ☑ Hiking
- ☐ Equestrian trails
- ☐ Fishing
- ☐ Rock Climbing
- ☑ Other (Specify) [Tortoise and Lizard Watching]